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THE RESEARCH OF ONLINE SERVICE RECOVERY BASED ON KANO'S MODEL

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Abstract

To identify customer requirements regarding e-retailing service failures, this study applied Kano's model to sort the e-retailing compensation elements into various categories for identifying the key elements, maximizing customer satisfaction and minimizing customer dissatisfaction based on investigation of the sample of 167 e-retailing customers. The result indicates that a psychological compensation is the basic requirement of e-retailing customer and a refund can improve customer satisfaction when any service failure is occurred. Moreover, an economic compensation is indifferent for a dissatisfied customer. The result can help the e-retailer to understand what different compensations would have diverse effects on customers and provide effective guidelines to reduce customer's dissatisfaction caused by the service failure.

Keywords: Online Retailing, Service Failure, Service Recovery, Kano's Model

Introduction

No matter what it is in traditional or online business models, to maintain a long-term relationship with the customers is one of the essential factors to determine whether the enterprise can run its business continuously. Plenty of researches show that the cost to keep the original customers is much lower than to attract the new ones [10]; therefore, it is more important to keep the original customers than to find the new ones for an enterprise. The enterprise may provide a series of services during the dealing process with the customers. As the service is invisible, indivisible, variable, perishable and the like [9], the service failure becomes unavoidable. Therefore, it is quite important to carry out the recovery strategy after the service failure. A good recovery will significantly influence the service effects, which include the customer satisfaction, repurchase intention and positive word-of-mouth reputation [4] [11] [14] [24]. When the service failure happens, the enterprise should provide a good compensation, which would greatly enhance the customer satisfaction [11]. The research of [29] [33] finds that the customers received the compensation by

the enterprise should have higher satisfaction than those who never encounter the service failure. However, to everyone's surprise, the customers encountered the service failure always cannot receive a satisfied compensation [18]. Furthermore, the research indicates that nearly 50% of the compensations deepen the negative emotion of the customers. Therefore, the provided compensation right after the failure may be the key factor to determine whether the enterprise can continuously maintain a good and long-term relationship with the customers or not.

The relevant researches of the previous online service compensation include to find out the compensations of online service against the critical incident method and further classification; some researchers also discuss the relationship between compensation strategy and customer satisfaction. However, these researches all assume that the relationship between the compensation and customer satisfaction is a linear relationship; that means the more the compensation you provide, the more the satisfied customers will be (or may decrease the dissatisfaction). Apology is required if the error occurs, but the customers might not be satisfied just because of your apology. Therefore, an apology is one necessary (hygiene) factor but not a motivation factor. Furthermore, it is required to provide the return service, which belongs to the hygiene factor. The customers will not be satisfied with your services without the return service. If this service is not provided, the customers will therefore be dissatisfied. Consequently, different customer compensations are with different properties provided. What's more, this study discusses that the online service compensations should provide with different properties in order to make up for the customer dissatisfaction in accordance with the Kano's model of the Motivation-Hygiene Theory [19]. The result can be taken as the reference for the online retailers regarding the compensations, which would enhance the customer satisfaction and distribute the efficiency effectively.

Theoretical Background Online Retailing

The popularization of the Internet has become a

new media of corporate marketing and stimulated the development of an e-commerce in recent years. The retailers have also encountered extreme impact in the tide of informationization and gradually transformed the entity store into the virtual web store [13]. The basic concept of online retailing is based on the virtual web store. The customers can purchase the commodities by entering the virtual web store through the public or private Internet. The definition of online retailing is the website which provides the commodities or services on the Internet and allows the customers ordering directly through online. Moreover, the following types are divided in accordance with the different commodities. 1. Single store: you have to handle many things, including the website building, commodities selling, customers encounter and so on. 2. Specialty store: it mainly provides one single kind commodity with abundant information. 3. Online store: this kind of website directly provides the sales service on the Internet against the method of electronic catalog. 4. Shopping center: it is composed of many online stores; therefore, it provides many kinds of commodities.

The Institute for Information Industry (1997) proposes the definitions of web-store are divided in the broad sense and narrow sense. The broad sense means it provides not only the commodities and service but the purchase order on the Internet; meanwhile, it allows the consumers to order online directly. If the website can only provide the static information like an advertisement, commodity display and so on and must be ordered through the phone, transfer and the like; strictly speaking, it can not be called as a web-store. However, the narrow sense means all the trading procedures, such as the commodities browsing, ordering, paying and the like must be completed on the Internet and this can finally be called a web-store.

For example, the entity retailing store Barns & Noble, it not only set up the bookstore on the Internet but integrate many information technology to support the customers, such as e-paper, electronic greeting card and the like. Amazon.com is one another successful example. As the application of the information technology in the retailing industry is more and more common, the retailing industry has gradually transformed into the virtual and the informationization has been found in the operation of some enterprises. The enterprises are also aware that the activity cost of the value chain has extremely changed during the conversion process.

Service Failure

As the service possesses the same characteristics of production and consumption and the "people" plays an important role in the service, however, the

service failure is unavoidable. The definition of service failure: it means to make the customers feel dissatisfied during the process of service delivery and this process is called the service failure [28]. The service failure can also be said that the service requirement of the customer has not been achieved, delayed or lowered than the acceptable range during the service process. Since 1980, there are plenty of scholars have discussed the reasons of service failure from different viewpoints and it can be mainly divided into two categories, one is to discuss the failure and influence, such as [1] [3] [23] [32] and the like; the other is to find out the failure type against the Critical Incident Technique (CIT), such as [3] [20] [24], and the like.

Bitner et al. [3], exploits CIT to collect 699 failure events occurring in restaurants, hotels and airline companies and further divides the failures into three categories: 1. The reaction of the failure is to the employee during the service delivery process, such as the reaction of delayed service and other core services; 2. The reactions of the requirement and demand of the customer are to the employee during the service delivery process, such as the reactions of the special requirement and hobby to the customers and the reactions that the customer admits the mistake and disturbs other customers; 3. The spontaneous behaviors of the employee during the service delivery process occur, such as the consideration for the customers, the unusual behaviors, which are under the cultural norms and the like. Many scholars consider that the more serious the failure is, the lower the dissatisfaction will be [8] [12] [20]. The serious failure will result in more complains and lower loyalty. In such case, the service will be influenced against the subjective and objective cognitions of the customer and includes various requirements and people involvement; therefore, the failure becomes unavoidable.

Holloway & Beatty [21], proceeded with two researches against the failure event of online shopping. They first interviewed 30 consumers who had ever shopped online within the past six months and at least experienced one service failure and then further divided the service failure into seven categories. Afterwards, they broadened the sample information at the second time. They interviewed 314 consumers who had ever shopped online within the past six months and experienced one service failure and finally received 295 effective samples. The failures will be divided into seven categories, including 1. Delivery problems: the late delivery, undelivered and wrong delivery; 2. Website design problem: the on-line problem, incomplete product information, undisclosed inventory and wrong product information; 3. Customer service problems: the bad

communication, unfair return policy and unclear return policy; 4. Payment problems: the overcharge, undefined purchase procedure and payment difficulty; 5. Security problems: the risk of credit card payment and disclosure of the personal information; 6. Miscellaneous: the response failure, overcharge to some certain customers and lack of personal information; 7. Others. The delivery is the most common problem for online shopping within the seven categories.

No matter what it is an entity shopping or online shopping, the different failures will occur during the service process, including the ineffective service, delayed service and other relevant failures. Sometimes it may influence the feeling of the consumer because of the time, seriousness and failure frequency. Therefore, it is required to further classify the service failure. The service failure can be generally divided into subjectiveness and objectivity. Referring to the subjectiveness, Bell et al. [2], considered that if the service process is not the same as what he or she expects, that is a failure; when it refers to the objectivity, Palmer et al. [33], considered that the service provider is unable to grant the appointed service and finally result in the failure, such as the deferred delivery, discrepant specifications and so on.

We can know from the reference that once the failure occurs, the appropriate compensation is required. The dissatisfaction and complain of the customer and the negative influence to the enterprise will be decreased due to the compensation. Therefore, the service provider shall invest the cost of compensation in order to maintain the relationship with the customers and further avoid the current customers turning to other competitors.

Service Recovery

Klaus & Christine [26], considered that the service provider should strive for the zero defect and make the correct decision at the very time. The failures in e-commerce and online shopping are unavoidable and the existence of failure will bring lots of lethality to any company. Therefore, the compensation is extremely important [1] [5] [6]. However, the definition of the service recovery is that the service provider tries to decrease the harm during the service delivery process [17] [18], or it may be said as the action that the enterprise carries out against the failure [15]. The intention is to turn the dissatisfied customers into satisfied and expect to retain the customers in the future.

Kelley et al., [24], chose the retail industry as the panels and figured out 12 compensation strategies. They are the discount, failure correction, failure correction and compensation, commodity replacement, apology, refund, correction demanded

by the customers, coupon, correction method if dissatisfied, deteriorating treatment, no treatment and entity retailer replacement. Among all, the commodity replacement is the most common compensation, the correction demanded by the customers is the least common one; the failure correction brings the highest repatronage rate and if there is not any action taken, the repatronage rate will be the lowest. Forbes et al., [10], exploited the classification of the compensation proposed by Kelley et al., [24], to discuss the compensation strategy of online shopping. They interviewed the consumers who had ever experienced the service recovery and received 382 key events, in which the customers experienced the service failure can only be retained by the entity retailer replacement. However, the customers might turn to other competitors if carrying out other compensation strategies. Therefore, the service compensation is extremely important.

Holloway & Beatty [21], interviewed the customers who had ever shopped online and indicated that only 5% customers are satisfied with the service recovery provided by the enterprise. Those dissatisfied with the compensation may think the compensation is too inflexible and the customer service quality is bad. Furthermore, they may feel unfair. However, the main reasons why the customers dissatisfied are: they need more compensations, they do not receive any reply from the enterprise, bad interaction relationship, lack of apology or they even consider the enterprise provides not enough measures to make up for the failure. When people shop online, they are lack for the communication chance with people. This might result in some problems because of different from the entity environment; hence, the customers may not be satisfied with the compensation. If the customer encounters the failure, the compensation provided by the service provider may belong to the concept of one-dimensional quality and it is said that when there is the compensation, the customer satisfaction will be raised up; on the contrary, when there is no compensation, the customer will be dissatisfied. However, the truth is, if any failure occurs, an apology is required but the customer would not be satisfied with that. This belongs to the hygiene factor and the customer would not be satisfied even more services provided. Therefore, we look forward to studying what compensations consumers might require two-dimensional quality model and how much compensation could satisfy with the consumers and distribute the enterprise resource effectively.

Kano's Model

The concept of two-dimensional quality derives from the Motivation-Hygiene Theory by Herzberg

[19], or it may be called as the Two-Factors Theory. Herzberg calls these factors, which can remove the dissatisfaction of the hygiene factors, if equipping with this element. Even though it would be accepted by the customers, it is still unable to enhance the satisfaction. However, if not equipping with this element, the customers will feel dissatisfied. The motivation factors mean if equipping with this element, it enables you to win the fancy of the customers. If not, the customers will still accept but feel satisfied.

Noriaki Kano [22] [35], (in Figure 1) develops the two-dimensional quality model against the Motivation-Hygiene Theory by Herzberg. The quality attribute is divided into six categories: 1. Attractive Quality Element: If equipping with this element, it enables you to win the fancy of the customers. If not, the customers will still accept and feel satisfied. 2. One-Dimensional Quality Element: If equipping with this element, you will receive the satisfaction of the customers. Moreover, the more the element is, the more the satisfied customers will be; on the other hand, if not equipping this element, it may cause the dissatisfaction of the customers. 3. Must-Be Quality Element: If equipping with this element, it enables you to win the acceptance of the customers but not any satisfaction will be raised up; however, if not equipping with this element, the customers will feel dissatisfied. 4. No Interest-Indifferent Ouality Element: No matter what this element exists or not, it will not influence the satisfaction or dissatisfaction of the customers. 5. Reverse Quality Element: If equipping with this element, the dissatisfaction of the customers may be raised up; however, if not, the customers may feel satisfied instead. 6. Questionable Result: It means the question may take place at the time of the inquiry or data gathering. However, the must-be quality belongs to the hygiene factor and the attractive quality belongs to the motivation factor. One-Dimensional Quality: If the commodity is defective, the return service is required. This action belongs to the hygiene factor and the consumers will not feel satisfied just because of any further service. This is because the return service is necessary and if there is no such service; the customers will therefore feel dissatisfied. Two-Dimensional Quality: If the commodity is perfect and the seller also includes along with an elegant gift or a discount coupon for the next consumption; however, if no such gift or coupon is given properly because the commodity is perfect. This action belongs to the motivation factor. Kano tries to investigate the demand to the depths of the customer's heart from the point of view of psychology and further analyze under the consideration of cost to enable the enterprise to

enhance the customer satisfaction and distribute the efficiency effectively.

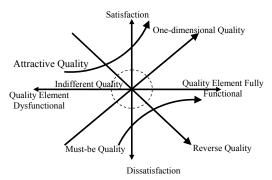


Figure 1: Kano's Model

The two-dimensional quality model exploits the questionnaire to understand the cognition and feeling of the customers towards each failure recovery item under the two situations of existence or non-existence. Furthermore, determine the category of each property against the evaluation by different proposed Kano. The table characteristics of two-dimensional quality will be received against each property. Afterwards, we can sort out the cumulative frequency numbers and the major one will be the final property category of two-dimensional quality. However, if the cumulative frequency numbers are the same, the final criterion is M>O>A>I [7]. The questionnaire proposed by Kano generally includes the quality properties items, such as the service quality inquiry or the customer satisfaction inquiry; moreover, the positive and negative items will also be included. The response options include like, must-be, neutral, live with and dislike. It is hard to analyze the potential requirement of the customer by a traditional questionnaire. Therefore, to investigate the feeling of the customer against each compensation property under the situations of satisfaction and dissatisfaction will help the enterprise to realize the feeling of the customer towards different compensations and know how to distribute the compensation resources in order to make up for the dissatisfaction caused by the service failure effectively.

The Research Method

Object of Research

The main studying object is the online retailing industry, such as Ruten, Yahoo, Books, PChome and the like, which are all our studying objects. The paper questionnaires to the consumers in middle Taiwan, who have ever made use of the online retailing.

Questionnaire Design

The research purpose is to investigate the key of strengthening the quality for the service recovery. We design the questionnaire against the two-dimensional quality model of Kano and analyze the return data to grasp the opinions of the customers towards the compensation elements and then further sort out the elements into six categories: attractive quality element, one-dimensional quality element, must-be quality element, no interest-indifferent quality element, reverse quality element and questionable result. Afterwards, analyze the compensation elements and dimensions against the different properties in order to make an appropriate decision, distribute the compensation resources and make up for the dissatisfaction caused by the failure effectively. In addition, we can figure out the questionnaire of online service recovery elements, including correction, correction plus, discount, replacement, store credit, apology, refund, unsatisfactory correction, failure escalation and nothing, counting up to ten dimensions and twenty-one questionnaire items against the online retailing failure and recovery strategy proposed by Forbes et al. [10], and category framework proposed by Kelley et al. [24], in order to further design the Kano's online service recovery questionnaire.

The particular part of Kano's model is to design the questionnaire, which is usually designed not only positively but negatively to meet the two-dimensional concept. The most important purpose of this design is to find out the response of the respondent when some certain quality element exists or not. Here we further sort out the five grades, including like, must-be, neutral, live with and dislike to indicate the satisfaction of the customer. The intention is to enable the respondents upon filling in the questionnaire more easily and allow us to analyze the staus of the satisfaction. Please refer to the table 1.

Table 1: A pair of Customer Requirement Questions in a Kano Questionnaire

Only wrong delivery	1. I like it that way.			
commodity correction	2. It must be that way.			
but without any other	3. I am neutral.			
compensation, how	4. I can live with it that			
do you think?	way.			
3	5. I dislike it that way.			
Exclude any wrong	1. I like it that way.			
delivery commodity	2. It must be that way.			
correction and any	3. I am neutral.			
other compensation,	4. I can live with it that			
how do you think?	way.			
	5. I dislike it that way.			

Afterwards, categorize the positive and

negative quality elements replied by the respondents against the Kano's method. Please refer to the table 2:

Table 2: Kano's Evaluation Table

Customer Requirements		Dysfunctional					
		1. like	2. must- be	3. neutral	4. live with	5. dislike	
Functional	1.like	Q	A	A	A	О	
	2.must- be	R	Ι	I	I	M	
	3.neutral	R	I	I	I	M	
	4.live with	R	Ι	I	I	M	
	5.dislike	R	R	R	R	Q	

Notes: A: Attractive; O: One-dimensional; M: Must-be; I: Indifferent; R: Reverse; Q: Questionable

For example, the dimension of failure correction can further be divided into wrong delivery commodity correction, the commodity maintenance acceleration and the explanation. The respondents may tick the options against the questions of "only wrong delivery commodity correction but without any other compensation" and "exclude any wrong delivery commodity correction and any other compensation" and then compare with the Kano's Evaluation Table. The research mainly exploits the Kano's model to investigate the feeling of the customers to each compensation property in order to ensure the service quality of the online retailing industry.

Table 3: Example of Kano's Evaluation Table

Only wrong delivery	■ I like it that way.
commodity	☐ It must be that way.
correction but	☐ I am neutral.
without any other	☐ I can live with it that
compensation, how	way.
do you think?	☐ I dislike it that way.
Exclude any wrong	☐ I like it that way.
delivery commodity	☐ It must be that way.
correction and any	☐ I am neutral.
other compensation,	☐ I can live with it that
how do you think?	way.
	I dislike it that way.

Table 4: Respondent Example of Kano's Evaluation Table

Customer Requirements		Dysfunctional					
		1. like	2. must- be	3. neutral	4. live with	5. dislike	
	1.like	Q	Α	A	A	O	
Functional	2.must- be	R	Ι	I	I	M	
	3.neutral	R	I	I	I	M	
	4.live with	R	Ι	I	I	M	
	5.dislike	R	R	R	R	Q	

Change O value into 1

The research Result and Conclusion Sampling Data Analysis

Total 167 questionnaires are retrieved in this research and the duration is two weeks $(2009/03/09\sim2009/03/23)$. After omitting the invalid questionnaires by the labor screening, there are total 162 valid questionnaires remained. The basic background information of the respondent is as follows: the proportion of male to female is 51.8% and 48.2% separately; the major age range is 20-30 years old (56.7%) and then above 30 years old (39.5%); as to the occupation, students are the major part (42.6%) and then the military servants, government employees and teachers (27.8%); when it comes to the level of education, the graduate school (47.5%) and then the college (42.5%); as to the monthly income, the major part is under twenty thousand (48%) and then twenty to forty thousand (31%). The proportion with highly acceptance of the online shopping is 37.6%. This sampling structure conforms to the research that is to investigate the domestic B2C behaviors and the development trend proposed by III (Institute for Information Industry), 2007, in which the proportion of male to female is 50.2% and 49.8% separately. The major age range is 20-29 years old and the students and the officers are the major occupations (82%). The major level of education is college (77%) and the average monthly income is NT\$20,000.

Two-Dimensional Quality Element Analysis

Figure out the table 5 for the results of the online retailing industry equipping or not equipping with the service recovery quality element against Kano's model. The service recovery quality element can be divided into six categories: Attractive Quality Element (A), One-Dimensional Quality Element (O), Must-Be Quality Element (M), No Interest-Indifferent Quality Element (I), Reverse Quality Element (R), and Questionable Result (Q).

Table 5: Kano Category for Online Service

Recovery Quality Elements

	_			1			C /
Quality Element	M	О	A	I	R	Q	Categ ory
Wrong Delivery Commodity Correction	78	28	8	34	1	13	М
Speed up the Commodity Maintenance	60	18	26	43	3	12	M
Failure Explanation	43	16	1	55	7	40	I
Upgrade the Product for Free	19	44	43	51	0	5	I
Gift for Free	21	37	42	53	2	7	I
Wrong or Defective Commodity for Free	16	23	26	79	9	9	I
Purchase the Commodity with Lower Price	26	34	30	53	4	15	I
Purchase the Commodity with Free Freight Charge	30	40	26	55	3	8	I
Select the Commodity with the Same Price as the Substitute	42	12	13	50	19	26	I
Select the Commodity with Higher Price as the Substitute	16	42	32	53	4	15	I
Cash Discount for the Next Consumption	20	27	24	64	9	18	I
Free Freight Charge for the Next Consumption	30	23	24	62	8	15	I
Oral Apology	44	19	7	42	12	38	M
Refund to the Buyer	45	53	16	30	6	12	О
Buyer Take Charge of the Freight Charge of Commodity Replacement	5	5	1	25	74	52	R
Too Much Time Wasted Whilst the Commodity Replacement or Maintenance	6	4	4	33	76	39	R
Seller Blame for the Failure on the Customer	4	2	1	20	85	50	R
Mark the Negative Evaluation on the Buyer	9	5	4	35	70	38	R
Face the Buyer with the Worst Attitude	3	3	1	18	90	47	R
Time (Money, Mind) Wasted	11	1	2	49	57	42	R
No Compensation If the Failure Is Caused by the Buyer	19	2	2	64	42	33	I

Notes: A: Attractive; O: One-dimensional; M: Must-be; I: Indifferent; R: Reverse; Q: Questionable

According to the answers of the respondents, "Wrong Delivery Commodity Correction", "Speed up the Commodity Maintenance" and "Oral Apology" are the required quality elements (M). It represents that only the three items are included, the customers will be satisfied; however, the customer satisfaction will therefore be raised up by the three items. On the contrary, if the three items are not included, the customers will feel dissatisfied. "Refund to the Buyer" belongs to one-dimensional quality (O). Refund can satisfy with the customers or the customers will feel dissatisfied. "Upgrade the Product for Free", "Gift for Free", "Wrong or Defective Commodity for Free", "Purchase the Commodity with Lower Price", "Purchase the Commodity with Free Freight Charge", "Select the Commodity with the Same Price as the Substitute", "Select the Commodity with Higher Price as the Substitute", "Cash Discount for the Next Consumption", "Free Freight Charge for the Next Consumption" and "No Compensation If the Failure Is Caused by the Buyer" belong to the No Interest-Indifferent Ouality Element (I) and the consumers do not care if the seller provides these recoveries or not after the service failure. Its proportion of male to female is 43.2% and 44.4% respectively, the majority of age range is 20-30 years old (51.8%), the majority of occupation is the students (38.2%), the major part of education is from graduate school (41.9%) and the major part of monthly income is under twenty thousand (41.3%).

Moreover, "Buyer Take Charge of the Freight Charge of Commodity Replacement", "Too Much Time Wasted Whilst the Commodity Replacement or Maintenance", "Seller Blame for the Failure on the Customer", "Mark the Negative Evaluation on the Buyer", "Face the Buyer with the Worst Attitude" and "Time (Money, Mind) Wasted" belong to the Reverse Quality Element(R). The six elements are reverse questions; therefore, the customers will be dissatisfied if equipping with these elements but feel dissatisfied if not equipping with them.

Conclusion and Discussion

Referring to the relevant researches of online service recovery in the past, we can find that some may find out the recoveries of online retailing industry and further sort out. Some scholars may investigate the relationship between the recovery strategy and customer satisfaction [16] [27] [30]. However, these researches all presume that the relationship between the recovery strategy and customer satisfaction is a linear relationship. That is the more the recovery is, the more the satisfied customers will be. However, the truth is not like this. In such case, this research combines the

recovery strategy of online retailing proposed by Forbes [10], and the Kano's model to investigate if the recovery provided by the enterprise can satisfy with the customers or not. This can be the reference of the service recovery for the online retailing industry in order to rise up the customer satisfaction and distribute the enterprise resource effectively.

This research investigates 167 consumers who have had online shopping experience in the past six month. The result shows that it is not each compensation method could satisfy with the customers; that mean the different compensation method will result in the different influence on the consumers. Among the twenty one compensation elements, one is part of the one-dimensional quality (Refund to the Buyer), three elements belong to the must-be quality (Oral Apology, Wrong Delivery Commodity Correction, Speed up the Commodity Maintenance), six elements belong to the Reverse Quality (Buyer Take Charge of the Freight Charge of Commodity Replacement and the like) and there included 11 elements in the Interest-indifferent Quality (Failure Explanation, Upgrade the Product for Free and the like). We can master the above result upon any service failure occurred the seller should face, admit and handle it with a responsible attitude. Therefore, the consumers consider that the oral apology and prompt recovery are required. That is the seller should deal with the failure like as abovementioned; however, the consumers might not feel satisfied just because the seller does not take any correction. Moreover, if the seller can refund the payment to the consumers, the consumers may feel satisfied because of this behavior. On the contrary, if the seller cannot face the failure properly and even worse to blame the buyer, refuse to replace, repair the commodity or ask the buyer to pay for the replacement postage, the consumers would feel unsatisfied because of the attitude of the seller.

The research result conforms to the outcome proposed by Kelley [24], and Forbes et al., [10]. The other findings of this research are that the "Correction", "Correction plus", "Discount", "Replacement", "Store credit", "Apology", "Refund", "Unsatisfactory correction", "Failure escalation" and "Nothing" are the most application method for the recovery for the e-commerce retail[10]. However, the compensation methods, such as the failure explanation, discount and so on after the service failure will not effect the satisfaction of the customer. We can know that if the seller only explains the reasons for the failure, it imply that the seller does not admit the failure; therefore, the consumers will ignore this and reject by any economic compensation method provided by the seller.

We can find through this research that the compensation methods, which satisfy with the customers, are the compensations in reality and mind, such as apology, quick commodity maintenance and wrong commodity correction. The economical compensation does not play a lot of influences on the customer satisfaction. In such case, we can know that the consumers consider that once the failure occurs, the seller shall take action positively and express their sincerity in order to enhance the trust and faith of the customers. Moreover, the economical compensations are usually the recoveries after the failure and may result in dissatisfaction and lower reliability because it is hard to carry on at the very time. In addition, it may be because the consumer might spend a lot of times in searching for the commodity to make the decision, but he still cannot receive the commodity appropriately. The best solution to this is to refund the payment to the consumer and this may rise up the customer satisfaction; however, any discount replacement cannot really influence the customer satisfaction.

The consumers may feel dissatisfied because the gaps between the expectation and result. This difference can be analyzed against the Perceived Justice theory [4, 25, 26, 34], and further recovered, such as the buyer may feel dissatisfied because he has not received the commodity. According to the result, the buyer hopes that the enterprise can apologize orally, correct the wrong delivery commodity and speed up the commodity maintenance. The three compensation methods are required for the buyer (must be done but the buyer may not feel satisfied because of this); however, a refund may satisfy with the buyer. If the buyer only takes charge of the replacement payment instead of the refund, the buyer will feel dissatisfied. Once if the customer encounters the service failure whilst shopping online, the repurchase intention will be very low even any service recovery is carried out then. Some scholars investigate the consumers after the compensation strategy proposed by the enterprise or only focus on the negative emotions resulted from the compensation discussion but ignore if the negative emotions are due to the wrong compensation methods. Furthermore, people seldom exploit the Kano's model to discuss the online service recovery. The enterprise can satisfy with the customers against the compensation methods proposed by this research and raise up the repurchase intention through the equity theory.

Follow-up Research and Suggestion

This research proposes the following follow-up research and suggestion against the shortage of the time, questionnaire, reference review and experimental analysis and discussion:

- (1)The compensation strategies can not all satisfy with the customers. It seems very important to find out the difference of the compensation through the two-dimensional model. We suggest not applying the compensation method of the entity shop on the online compensation because the consumption models of the both are really different. We can also put the emphasis on how to avoid any failure occurring.
- (2)This research exploits positive and negative questionnaire to meet the Kano's model. Furthermore, we lay down the questions one positive by another negative in order to receive a better result and reliability.
- (3)Within the limitation of the labor power and material resources, we only focus on the consumers of middle Taiwan who have ever experienced the online retailing. We can expand the sampling range in the future and further present against a tales' situation to enable the respondents to realize the real condition in order to receive a more realistic result.
- (4)The time change will also alter the result from the Kano's model. The attractive quality elements may transfer into the one-dimensional quality elements, even may transfer into the must-be quality elements. Therefore, a regular investigation is required in order to master the condition of the psychological cognition of the customers.

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